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OPIC Office de la propriété INTELLECTUELLE DU CANADA



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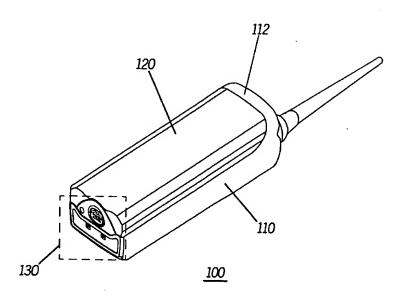
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(54) DISPOSITIF DE RETENUE POUR BATTERIE

(54) BATTERY LATCH



(57) Bloc batterie amovible (120) comprenant un verrou (200) pour l'assemblage à un accouplement à verrou (700) d'un dispositif électronique (110). Le bloc batterie amovible (120) comprend une douille (432) qui s'adapte sur le verrou d'accouplement (700). Un élément de verrouillage résilient, déformable (260), est assujetti à l'intérieur de la douille (432). L'élément de verrouillage (260) comprend une partie verrou (266, 268) qui vient saisir une partie (715) du verrou d'accouplement (700). Un bouton (270) monté sur l'élément de verrou (260) peut être enfoncé pour provoquer la déformation de l'élément de verrou (260).

(57) A removable battery package (120) has a latch assembly (200) for attaching to a latch coupler (700) of an electronic device (110). The removable battery package (120) includes a socket (432) that mates with the latch coupler (700). A resilient, deflectable latch member (260) is secured within the socket (432). The latch member (260) has a latch portion (266, 268) to engage a portion (715) of the latch coupler (700). A button (270), mounted on the latch member (260), is depressible to deflect the latch member (260).

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BATTERY LATCH

Abstract of the Disclosure

A removable battery package (120) has a latch assembly (200) for attaching to a latch coupler (700) of an electronic device (110). The removable battery package (120) includes a socket (432) that mates with the latch coupler (700). A resilient, deflectable latch member (260) is secured within the socket (432). The latch member (260) has a latch portion (266, 268) to engage a portion (715) of the latch coupler (700). A button (270), mounted on the latch member (260), is depressible to deflect the latch member (260).

Claims

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- 1. A removable battery package having a latch assembly for attaching to an electronic device, the electronic device having a latch coupler, the removable battery package comprising:
 - a battery housing having a socket that mates with the latch coupler;
 - a latch member secured within the socket, the latch member being resilient and deflectable, and being biased in a first position, the latch member having a latch portion for engaging the latch coupler; and
 - a button mounted on the latch member, the button being depressible to deflect the latch member to a second position.
- The battery package of claim 1, wherein:
 the button is slidable along the latch member between a locked position and an unlocked position;
 the button is movable to deflect the latch member to the second position when the button is in the unlocked position; and
 movement of the button is substantially restricted when the button is in the locked position.
 - 3. The battery package of claim 1, wherein the socket is defined by a plurality of sidewalls including at least one sidewall having a button hole extending therethrough.
 - 4. The battery package of claim 3, wherein the battery housing comprises a first battery housing member, the first battery housing member having a cavity portion defined by first and second surfaces, the first surface having projections extending therefrom, the second surface having projections that terminate adjacent to corresponding projections of the first surface to define a narrow channel, the first battery housing member having a raised portion extending within the cavity portion.

5. The battery package of claim 4, wherein the socket is defined by a second battery housing member attached to the first battery housing member and having a overhanging wall extending over the cavity portion to define the socket, the overhanging wall forming the at least one sidewall.

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- 6. A electronic device and battery assembly, comprising:
- a electronic device housing having a latch coupler;
- a battery housing having a latch socket;
- a latch member disposed within the latch socket, the latch member being resilient and deflectable;
- a button movably mounted within the battery housing to selectively deflect the latch member;

wherein:

the latch coupler is selectively mated with the latch socket such that the latch member biasly engages the latch coupler, thereby securing the battery housing to the electronic device housing; and

the button is depressible to deflect the latch member thereby disengaging the latch member from the latch coupler, thereby releasing the battery housing from the electronic device housing.

7. The electronic device and battery assembly of claim 6, wherein: the button is slidable along the latch member between a locked position and an unlocked position;

the button is movable to deflect the latch member when the button is in the unlocked position; and

movement of the button is substantially restricted when the button is in the locked position.

8. The electronic device and battery assembly of claim 6, wherein the latch socket is defined by a plurality of sidewalls including at least one sidewall having a button hole extending therethrough, and wherein the button extends through the button hole.

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- 9. A radio and battery assembly, comprising:
- a radio housing member having a latch coupler;
- a removable battery package selectively attached to the radio housing member, the removable battery package having a latch assembly, the latch assembly being mated with the latch coupler when the removable battery package is attached to the radio housing member, the latch assembly comprising:
 - a battery housing having a mount socket, and a button hole adjacent to the mount socket;
 - a cantilever member secured within the mount socket, the cantilever member having a catch;
 - a button mounted to the cantilever member and being biased by the cantilever member, the button being movably positioned within the button hole;
- wherein the catch of the cantilever member engages the latch coupler, and button is movable to deflect the cantilever member to disengage the catch from the latch coupler.
- 10. The radio and battery assembly of claim 9, wherein: the button is slidable along the cantilever member between a locked position and an unlocked position; the button is movable to deflect the cantilever member when the button is in the unlocked position; and movement of the button is substantially restricted when the button is in the locked position.

FIG.1

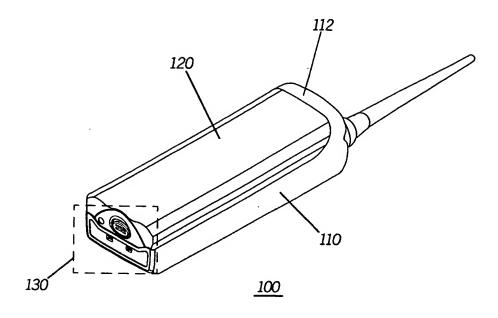


FIG.4

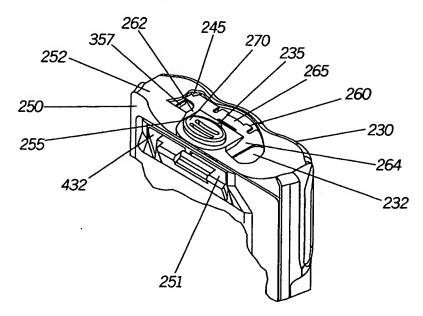


FIG.2

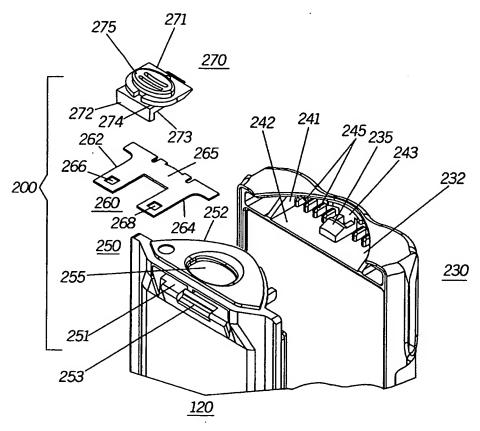
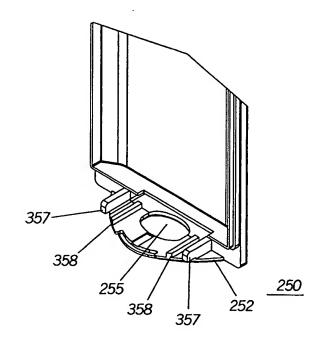
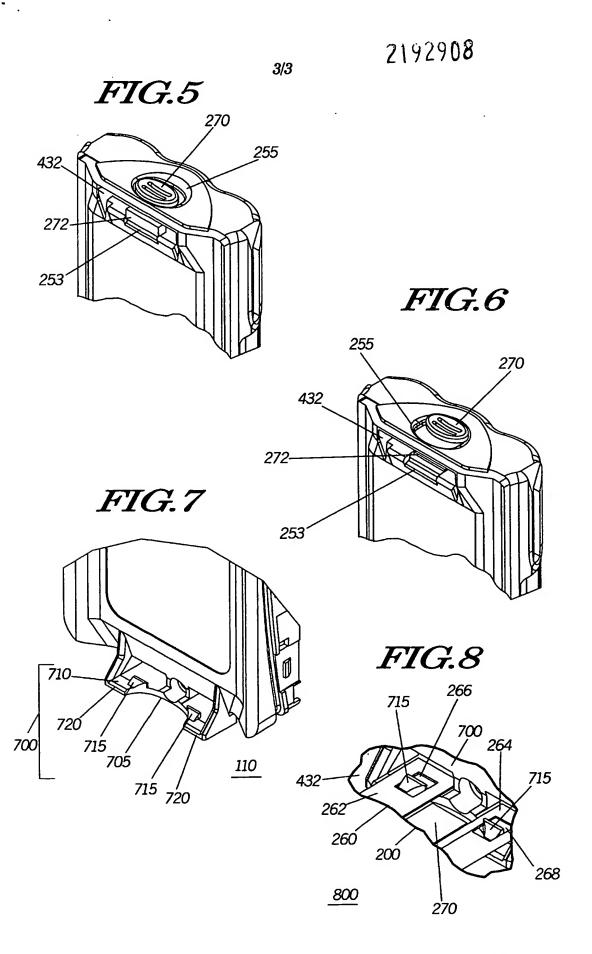


FIG.3



Gooding, Strathy & Honderson



Gooding, Strathy & Hondonia